# Operating Systems

## Tutorial 2 & 16

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Calendar Week 4

# Outline

# True or False

- Allowing groups in ACLs generally makes the ACLs smaller in size
- When using sequential access for a file a `write` overwrites the bytes on the current position
- VFS is a very fast file system designed for high definition video streaming servers

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# Describe the effect of mounting a file system

# An XFS containing a file `/foo/bar` is mounted as `/mnt/extras` in an ext3 file system

Depict the resulting name space and describe the resolution for `/mnt/etras/foo/bar/baz`

# How does contiguous allocation work?

## Pros and cons of this approach

# How does linked allocation work?

## What is the major problem?

# What is the basic idea of a file allocation table (FAT)?

# How does indexed allocation work?

# How can indexed allocation be modified to allow for very large files without increasing the index block size?

# What is the maximum file size?

| | |
|---|---|
| Disk Block | 8KB |
| Block Address | 4 Bytes |
| Inode | • 12 references to direct blocks<br>• 1 reference to a single, double and triple indirect block |

# Which of the following is typically stored in an inode?

- File name
- Name of containing directory
- File size
- File type
- Number of symbolic links to the file
- Name/location of the symbolic links to the file
- Number of hard links to the file
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- Access rights
- Timestamps (last accessed, last modified)
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# How can directories be implemented?

## What information is stored in them?

# What are hard links?

# What are symbolic links?

# How do you create the following links on GNU/Linux?

## A hard link `h` to file `f` and a symbolic link `s` to the same file

# What happens if you rename `f` to `g`?

Is the file still accessible via the links?

# Would the same be true if you had copied `f` to `g` and then removed `f`?

# What happens if you now create a new file `f`?

# What is the benefit of symbolic links?

# Your bitmap or list of free blocks has been corrupted

## How to recover from this situation?

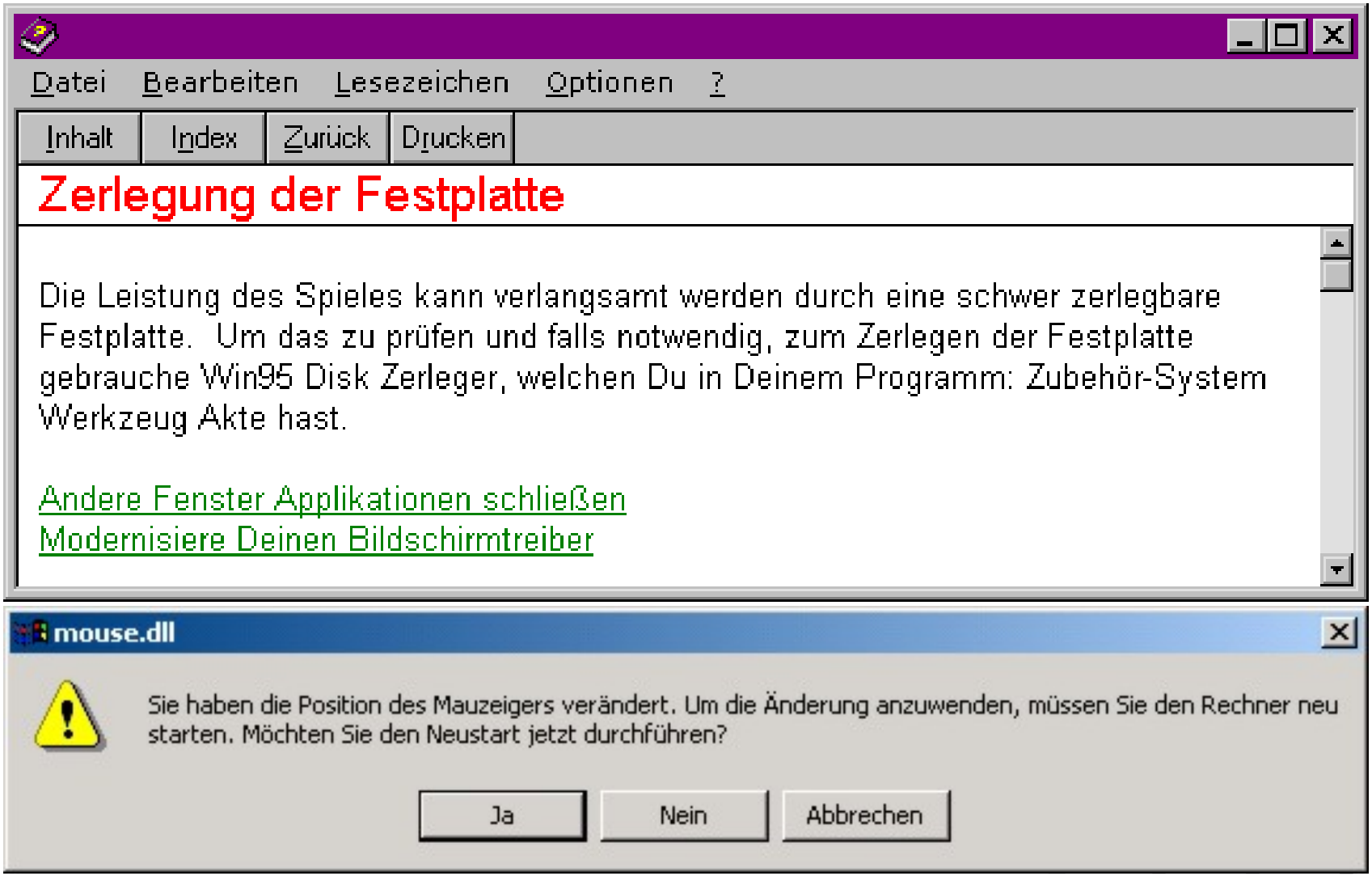
# What is the basic idea of a file system cache in memory?

# Pros and cons of a fixed limit between file system cache and main memory area used for paging

# Some systems offer read ahead

## Discuss pros and cons

# The End


Datei Bearbeiten Lesezeichen Optionen ?
Inhalt Index Zurück Drucken
Zerlegung der Festplatte
Die Leistung des Spieles kann verlangsamt werden durch eine schwer zerlegbare Festplatte. Um das zu prüfen und falls notwendig, zum Zerlegen der Festplatte gebrauche Win95 Disk Zerleger, welchen Du in Deinem Programm: Zubehör-System Werkzeug Akte hast.
Andere Fenster Applikationen schließen
Modernisiere Deinen Bildschirmtreiber
mouse.dll
Sie haben die Position des Mauzeigers verändert. Um die Änderung anzuwenden, müssen Sie den Rechner neu starten. Möchten Sie den Neustart jetzt durchführen?
Ja
Nein
Abbrechen